#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau



### (43) International Publication Date 9 September 2005 (09.09.2005)

#### PCT

# (10) International Publication Number: WO 2005/082886 A1

(51) International Patent Classification<sup>7</sup>: C07D 401/06, A61K 31/454, A61P 25/00

(21) International Application Number: PCT/EP2005/001446

(22) International Filing Date:

14 February 2005 (14.02.2005)

(25) Filing Language:

German

(26) Publication Language:

German

(30) Priority Data: 10 2004 010 132.9 27 February 2004 (27.02.2004) DE

- (71) Applicant (for all designated States except US): MERCK PATENT GMBH [DE/DE]; Frankfurter Strasse 250, 64293 Darmstadt (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HEINRICH, Timo [DE/DE]; Franz-Gruber-Strasse 30, 64823 Gross-Umstadt (DE). BOETTCHER, Henning [DE/DE]; Stiftstrasse 12, 64287 Darmstadt (DE). LEIBROCK, Joachim [DE/DE]; Muehlstrasse 91a, 64319 Pfungstadt (DE).
- (74) Common Representative: MERCK PATENT GMBH; Frankfurter Strasse 250, 64293 Darmstadt (DE).

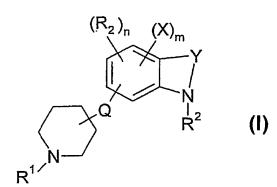
- (81) Designated states (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated states (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

#### (54) Title: PIPERIDINE DERIVATIVES



(57) Abstract: Compounds of the formula (I), in which R<sup>1</sup>, R<sup>2</sup>, Q, X, Y, m and n have the meanings indicated in Claim (1), are potent 5-HT<sub>2A</sub> antagonists and are suitable for the treatment of psychoses, schizophrenia, depression, neurological disorders, memory disorders, Parkinson's disease, amyotrophic lateral sclerosis, Alzheimer's disease, Huntington's disease, eating disorders, such as bulimia, anorexia nervosa, of premenstrual syndrome and/or for positively influencing obsessive-compulsive disorder (OCD).